

ABSTRACT OF THE DISCLOSURE

A current sensor for detecting a power supply current is commonly used for detecting a current of a stator winding to detect a rotational position of a magnet rotor, so that a sinusoidal driving is realized without adding two current sensors for detection of a phase current, and also a phase shift circuit and a comparator needed in the conventional 120-degree current feeding are not required, and the number of components can be reduced. Therefore, an inverter device with a low noise and low vibration, having a small size, light weight and high reliability is obtained.